

REMARKS

Support for amendments to the claims may be found at multiple locations throughout the application as-filed. Support can be found, for example, in the application at page 1, lines 28-33; page 5, lines 2-14; page 6, lines 1-24; page 7, lines 16-29; page 8, lines 24-28; page 12, lines 11-22; page 13, lines 5-15; and originally-filed claim 5.

Applicant respectfully submits that all of the pending claims, as amended, are patentable over the prior art on which the Examiner has previously relied. In particular, Applicant addresses below the grounds for rejection raised in the Examiner's previous final action and advisory action.

Rejection of claims 20, 22, and 23 under 35 U.S.C. § 112, second paragraph

The Examiner rejected claims 20 and 22-23 under 35 U.S.C. § 112, second paragraph. Claims 22 and 23 were rejected as lacking antecedent basis for a recitation of "the adjoining key," and a recitation of "its." Claim 20 was rejected as indefinite. Each of these claims has been amended as indicated above, and Applicant believes that the claims are now in condition for allowance.

Rejection of claim 19 under 35 U.S.C. § 102(b)

The Examiner rejected claim 19 under 35 U.S.C. § 102(b) as being anticipated by Numakura Wakako (Japanese Patent No. 61-184031) (hereinafter "Numakura").

This rejection is incorrect for multiple reasons. First, Numakura is merely directed to "registering an extension number of a telephone set desired for callback when a called party is absent." Thus, when a user pushes the button of Numakura, an extension number is simply retrieved from local recorder 5 and shown on a display section 13. Pending claim 19, in contrast, recites a voice message indicator that indicates when a voice message is waiting, and has a key that causes transmission of a message retrieval signal. That signal is transmitted to cause voice mail messages to be provided to a user of the telephone. The pending application indicates that it is known to display the name and telephone number of a calling party on a visual display, which is not recited in pending claim 19, *see* page 1, lines 21-25, and discusses

separately the retrieval of actual voice messages, which is addressed by pending claim 19. While Numakura may be directed in some measure to the display of names and numbers ("registration," in the terms of Numakura), it is not directed to the voice message retrieval addressed by the pending specification and recited in the pending claim. This is true even if one accepts the Examiner's statement that a telephone number may alone be a message.

Second, the light in Numakura is merely "accessoried to" a message registration button. This does not mean that it is "emits light through" the key, as required by amended claim 19. At most, Numakura indicates that the light is next to the key, as indicated by its figures, which shade the key and provide it with a label, but do not provide a label or shading to the lamp. The Office Action and Advisory Action also fail to indicate where Numakura discloses a light source that emits light through a message retrieval key, which provides benefits not provided by Numakura. In particular, the pending specification indicates why the provision of visible light from the message key itself, rather than from some area outside the message key, provides a "compact and intuitive user interface" that has many advantages, including particular advantages in low-light conditions where many telephone sets (including especially hotel telephones and cellular telephones) are used. *See* page 7, line 30 to page 8, line 32. Simply put, the arrangement in Numakura is merely the prior art arrangement that is distinguished in the pending specification because the lamp is not part of the key. Such an arrangement does not provide the benefits discussed in the application, and does not meet the limitations of claim 19.

Therefore, the Applicant respectfully submits that claim 19 is in condition for allowance.

Rejection of claim 20 under 35 U.S.C. § 102

The Examiner rejected claim 20 under 35 U.S.C. § 102(e) as being anticipated by Welch (U.S. Patent No. 5,938,772). Claim 20 has been amended to more particularly claim the invention; the Examiner did not consider these amendments in the Advisory Action. Claim 20, as amended, recites a telephone having an integrated message indicator light and message access key, along with a telephone speaker that provides audible access to one or more voice messages stored on a central voice messaging system that is located remotely from the telephone. Activation of the message key causes one or more messages to be output on the telephone speaker. Welch simply discusses a personal computer having a button array, in which one of the

buttons (button 280) relates to an electronic telephone answering machine ("TAM"). The system of Welch is complicated, and Welch discusses the interaction of the computer bus and processor with the various features controlled by each button. Because the computer is configured to enter a "sleep" mode, Welch also discloses numerous complicated hardware and algorithms for operating the system in the sleep mode. *See, e.g.*, Welch, Col. 8, line 41 to Col. 9, line 45, Pending claim 20, in contrast, simply recites a telephone—not a complicated computer. As explained in the pending specification, the invention can be implemented, for example, in a basic hotel telephone. The complicated computer of Welch simply does not teach or suggest implementation using a telephone, and an answering machine is quite distinct from a telephone. Thus, while Welch suggests complexity in its electronics and says nothing about features of a telephone, the pending claims recite a structure that can be made without excessive complexity (and that leaves the complexity to the remote messaging system), and has a full-featured interface.

In addition, claim 20 as amended recites that the telephone speaker provides audible access to messages on a central voice messaging system that is located remotely from the telephone. In contrast, the answering machine of Welch is located right on the personal computer, near the user. Again, this local answering machine storage (and the attendant functionality required to make it work) requires a more complex system than the simple telephone that is recited in claim 20. And again, Welch does not teach or even suggest this requirement of claim 20. For each of these reasons, the Applicant respectfully submits that claim 20 is in condition for allowance.

Rejection of claims 1, 5-8, 12-14, 18, and 21 under 35 U.S.C. § 103

The Examiner rejected claims 1, 5-8, 12-14, 18, and 21 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch. Claims 1 and 18 are the independent claims of this group. Each of claims 1 and 18 recites a voice message alert and retrieval device that is operably connected to a dialing interface, and that has a light responsive to a voice message waiting signal generated by a call management interface. The call management interface in both claims interprets control signals from the telephone set. Thus, the call management interface is part of a system that is apart and remote from the telephone itself. By keeping the call

management interface on a central system, the claimed telephone set can be implemented with less complexity and cost, as discussed above.

Neither Numakara nor Welch teaches in any manner the presence of a light that is responsive to a voice message waiting signal generated by a call management interface. Rather, in Welch, a light is powered from a local telephone answering machine ("TAM") system; this again underscores the complexity that is required to make the Welch system work. Likewise, in Numakara, the registration information (caller name and number) is stored locally to the telephone (in recorder 5), is not accessed using a call management interface, and does not relate to any sort of voice message.

Also, neither reference discloses a message key that emits light and has a distinct visual impression from its adjoining keys, as recited in claim 1 and claim 18. Rather, Numakura simply shows a button and an "accessoried" light, but does not show a button that emits light, as is discussed above. The is true even if one were to interpret the reference as showing a light attached to the key. For its part, Welch merely shows a button that is the same size and shape as its adjoining buttons. In fact, Welch refers to its group of buttons as an "array," which denotes that they are a group of similar objects—not visually distinct objects.

Moreover, claim 1 recites that the telephone is to be used with a private branch exchange (PBX) system, but neither Welch nor Numakura teaches such a limitation. As noted above, neither Welch nor Numakura discloses any sort of call management interface that provides messages, let alone a PBX interface. The Office Action asserts that "the switching system is inherently a [PBX]," but it fails to identify which system (Welch or Numakura) inherently uses a PBX. More importantly, inherency requires that the missing explicit disclosure (here, a PBX) *necessarily* be present, and there is nothing that indicates that Numakura or Welch necessarily must be used with a PBX system rather than some other sort of system. *See Scaltech, Inc. v. Retec/Tetra, LLC.*, 178 F.3d 1378, 1384, 51 USPQ2d 1055, 1059 (Fed. Cir. 1999) (an inherent limitation is one that is necessarily present, and is not established by "probabilities or possibilities.").

Even if one were to assume that the inventions of pending claims 1 and 18 could be pieced together from what is disclosed in Numakura and Welch, the Examiner has provided no evidence of a motivation to combine the two references. The final Office Action merely notes

that modifying Numakura with Welch "would have clarified the teaching of Numakara." But the fact that Numakara is unclear points *away from*, not toward, any conclusion of obviousness here. Also, there is nothing in Welch or Numakara that would lead a person of ordinary skill in the art to combine the references so as to achieve one of the inventions in pending claims 1 or 18. Moreover, the inventions of claims 1 and 18 would not have merely resulted as a matter of design choice, as asserted in the final Office Action. Rather, as indicated above, the inventions of claims 1 and 18 provide advantages over anything that is disclosed in either Welch or Numakura.

The dependent claims of this group differ even more from Welch and Numakura. For example, claim 5 recites that the telephone has a speaker to deliver the voice mail messages to the user. Also, dependent claim 21 recites that the message key has a visibly different shape than its adjoining keys. In Welch, every button is round. In Numakura, every button is rectangular. Thus, neither reference shows a button that is different in shape from its adjacent buttons. Rather, the Office Action's selection of a round key from one reference and a square key from a different reference uses insight gained from the Applicant's claimed invention in an improper hindsight analysis. *See In re Rouffet*, 149 F.3d 1350, 1358 (Fed. Cir. 1998) ("[T]he suggestion to combine requirement stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness."). There simply is no motivation to combine the references in this manner, and in fact, the references teach away because each shows arrangements in which *every* button (not just the buttons adjacent to a dialing button) is the same shape.

For each of these reasons, amended claims 1, 5-8, 12-14, 18 and 21 recite patentable inventions, and the Applicant respectfully requests their prompt allowance.

Rejection of claims 2-4 under 35 U.S.C. § 103

The Examiner rejected claims 2-4 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Kanzawa (U.S. Patent No. 5,535,262). Although the Applicant never amended these claims in his after-final response, the advisory action failed to address them. In any event, with the amendment of claim 1, these claims are even more distinct from the prior art than they were at the time of the final office action.

These dependent claims also recite additional features that are not found in the prior art. Claim 2 adds to claim 1 the feature that the message retrieval control signal comprises a predetermined series of dialing digits, while claim 3 further adds a memory that corresponds to the dialing digits, and claim 4 further adds a CPU connected to the dialing interface, the memory, and the call management interface. Thus, each of these claims recites that the message retrieval control signal comprises a predetermined series of dialing digits (such as a telephone number or telephone extension number).

Kanzawa fails to cure the deficiencies in Numakura and Welch for at least two reasons. First, Kanzawa merely describes a system for recording telephone conversations (such as portions of an ongoing telephone call with another party); it does not deal with retrieval of voice messages, and it distinguishes voice mail systems in its Background of the Invention. Therefore, it actually teaches away from the claimed invention. Kanzawa says nothing about voice message retrieval, and is concerned with an entirely different problem than the Applicant's invention or any of the prior art, and thus could not suggest a solution to the problem to which Applicant's claims are addressed.

Second, Kanzawa does not teach that function key 25, if pressed, sends a signal that comprises a predetermined series of dialing digits. Even the final Office Action only asserts that pushing the key generates a "message retrieval request." The Office Action fails to point to any indication that the supposed request (which actually is not a voice message retrieval request, as is discussed above) in any way generates a series of dialing digits.

Moreover, the Examiner has pointed to no motivation to alter or combine any of the references so as to produce the claimed invention, even though motivation to combine is a necessary requirement in reaching an obviousness conclusion. *See, e.g., In re Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002); *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). The Examiner has simply reached the conclusion that it would have been obvious to modify Wakako in one way or the other. But this does not meet that requirement of a showing that there is a motivation to modify Wakako to produce the invention as claimed here. Thus, the references fail to teach each of the limitations of the pending claims, and they further fail to provide a motivation to modify any reference or combine multiple references.

For each of these reasons, the Applicant respectfully requests reconsideration of the rejections.

Rejection of claims 9 and 10 under 35 U.S.C. § 103

The Examiner rejected claims 9 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Burgess (U.S. Patent No. 6,031,465). Again, these claims were not addressed in the advisory action even though they were unamended.

Claim 9 depends on claim 1, and adds that the message key comprises a touch-sensitive button. Claim 10 also depends on claim 1, and adds that the message key comprises a membrane switch. As an initial matter, because both claims depend on claim 1, they are patentable for the reasons identified above.

Both claims are also patentable because Burgess fails entirely to fill the gaps left by Welch and Numakura. In particular, Burgess involves a non-analogous area of art, and fails even to address the same or a similar problem as the present invention (or any of the other cited references). Burgess himself describes his challenge as the "problem of keyless entry." Given this clear statement, the Applicant cannot understand how an artisan of ordinary skill in the field of the pending telephone inventions would even look to the Burgess system for any teaching. *See Jurgens v. McKasy*, 927 F.2d 1552, 18 USPQ2d 1031 (Fed. Cir. 1991) (noting that nonanalogous art "has no bearing on the obviousness of the patent claim.").

In addition, no motivation has been identified in any of the references to make a combination or to modify one of the references so as to form the invention of claims 9 or 10. The Examiner's statement that the references teach that the "message button *could* be a membrane one," (*see* Office Action, at 11), does not indicate that there is any motivation that the buttons *should be* modified in any way or combined with Burgess. There simply is no motivation to combine these three references which are in wholly disparate fields.

The Applicant therefore respectfully requests reconsideration of the rejections.

Rejection of claims 11 and 17 under 35 U.S.C. § 103

The Examiner rejected claims 11 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Kavanaugh et al. (U.S. Patent No. 6,223,233). And again, these claims were unamended, but were not discussed in the Advisory Action.

Claim 11 depends on claim 1, and adds that the message key comprise a graphical icon. Claim 17 also depends on claim 1, and adds that the light source comprises a liquid crystal display element. As an initial matter, because both claims depend on claim 1, they are patentable for the reasons identified above.

Both claims are also patentable because Kavanaugh fails to provide the teachings that are missing from Numakura and Welch. In particular, Kavanaugh simply shows a "Wallet for Personal Information Device," and has nothing to do with retrieving voice messages in a telephone system. It is, therefore, nonanalogous (and therefore irrelevant) art. *See Jurgens v. McKasy*, 927 F.2d 1552, 18 USPQ2d 1031 (Fed. Cir. 1991). In addition, no motivation has been shown to modify Numakura or Welch (even if they were assumed to disclose the other claim limitations) using the teachings of Kavanaugh. Again, the rejection appears to involve an improper hindsight analysis that uses the teachings of the pending application as a guide to combine the various references, when there is no motivation to combine in the references themselves.

The Applicant therefore respectfully requests reconsideration of the rejections.

Rejection of claim 15 under 35 U.S.C. § 103

The Examiner rejected claim 15 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Charlier (U.S. Patent No. 5,153,590). Claim 15 depends on claim 1, and adds that the light source comprises an LED and light pipe assembly. As with the previous references, because this claim depends on claim 1, the Applicant respectfully asserts that it defines a patentable invention, for the reasons discussed above. Also, the Office Action identifies no motivation in any of the cited references (apart from the Applicant's own disclosure) that would lead an artisan of ordinary skill to combine any of the

references, let alone combine them so as to achieve the invention of pending claim 15. Thus, any such combination is plainly based on improper hindsight.

The Applicant therefore respectfully requests reconsideration of the rejection.

Rejection of claim 16 under 35 U.S.C. § 103

The Examiner rejected claim 16 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Akiyama (U.S. Patent No. 5,153,906). Claim 16 depends on claim 1, and adds that the light source comprises a matrix display assembly. As with the previous references, because this claim depends on claim 1, the Applicant submits that it defines a patentable invention, for the reasons discussed above. In addition, Akiyama's matrix display deals only with the label (61) that might be applied *adjacent to* a speed-dial button (62), but says nothing about using a matrix as part of the button itself. The use of a persistent label (i.e., one that continuously displays the name of a person) does not suggest the use of a matrix display to indicate the occurrence of a non-persistent event (e.g., the arrival of a voice mail message). Also, the Office Action identifies no motivation in any of the cited references (apart from the Applicant's own disclosure) that would lead an artisan of ordinary skill to combine any of the references, let alone combine them so as to achieve the invention of pending claim 16. Again, this points up the fact that the rejection uses an improper hindsight analysis.

The Applicant therefore respectfully requests reconsideration of the rejection.

Rejection of claims 22 and 23 under 35 U.S.C. § 103

The Examiner rejected claims 22 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Numakura in view of Welch and further in view of Sakayori (Japanese Patent No. 5-022428). Claim 22 depends on claim 1, and adds that the message key is spaced from adjoining keys by a distance that differs from each adjoining key and its corresponding next adjoining key. Claim 23 also depends on claim 1, and adds that the message key is spaced from at least one adjoining key by a distance that differs from the distance between the adjoining key and its next adjoining key. As such, both claims call for a message key that stands out visually at least in part because of its location and spacing relative to other keys in the telephone set.

As with the previous references, because this claim depends on claim 1, the Applicant submits that it defines a patentable invention, for the reasons discussed above. In addition, the Office Action identifies no motivation in any of the cited references (apart from the Applicant's own disclosure) that would lead an artisan of ordinary skill to combine any of the references, let alone combine them so as to achieve the inventions of pending claims 22 and 23. For example, Sakayori attaches no significance to the arrangement or spacing of its various buttons, and even appears to provide equal spacing between all of its buttons. Thus, an artisan of ordinary skill would have no reason to look to Sakayori to cure the defects in the the other references.

The Applicant therefore respectfully requests that all pending claims be allowed to issue at an early date.

With regard to all of the rejections on grounds of obviousness, even if one assumes that a prima facie case has been made, objective indicia of nonobviousness, which must be considered when determining obviousness *vel non*, show that the claimed invention would not have been obvious. In particular, U.S. Patent 6,556,663, which depends on provisional applications filed October 16, 2000—more than 18 months after the present application—has a voice message retrieval key (see item 28 in Fig. 1) that is a copy of the invention recited by the pending claims. Thus, for this reason also, the claims should be allowed. *See, e.g., Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 7 USPQ2d 1315 (Fed. Cir. 1988) ("Copying is an indicium of nonobviousness, and is to be given proper weight.").

CONCLUSION

Applicant submits that all of the claims are now in condition for allowance, which action is requested. The Examiner is invited to telephone the undersigned agent if it is felt that such would advance prosecution of the application.

Please apply any other charges or credits to Deposit Account No. 06-1050.